

# **Exhibit 133**

**From:** Ward, Anthony (CXFC) [/O=CREDIT-SUISSE/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=ANTHONY.WARD]  
**Sent:** 2/6/2018 2:50:58 AM  
**To:** Aurmont, Tair (CXFC 51) [tair.aurmont@credit-suisse.com]; Rippetoe, Grant L. (CXF) [grant.rippetoe@credit-suisse.com]; Penton, Philip (CLME) [philip.penton@credit-suisse.com]; Cross, Simon (CLME 23) [simon.cross@credit-suisse.com]; Rodger, Elena (CXFC 5) [elena.rodger@credit-suisse.com]  
**CC:** Benchekroun, Hamza (CLME 1) [hamza.belabbes@credit-suisse.com]  
**Subject:** RE: ITS Flow Update - Feb 5 selloff

Oh yes, the post mortem on this one will be big. Will be worth looking at tomorrow if we can.

Thanks

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**From:** Aurmont, Tair (CXFC 51) <tair.aurmont@credit-suisse.com>  
**Date:** Monday, Feb 05, 2018, 21:49  
**To:** Ward, Anthony (CXFC) <anthony.ward@credit-suisse.com>, Rippetoe, Grant L. (CXF) <grant.rippetoe@credit-suisse.com>, Penton, Philip (CLME) <philip.penton@credit-suisse.com>, Cross, Simon (CLME 23) <simon.cross@credit-suisse.com>, Rodger, Elena (CXFC 5) <elena.rodger@credit-suisse.com>  
**Cc:** Benchekroun, Hamza (CLME 1) <hamza.belabbes@credit-suisse.com>  
**Subject:** RE: ITS Flow Update - Feb 5 selloff

I'll ask for minute-by-minute details tmrw.  
 I've taken BBerg trade order snapshots and will take a look at MO data.  
 There will be a lot of post-mortems to follow.

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**From:** Ward, Anthony (CXFC)  
**Sent:** Monday, February 05, 2018 9:44 PM  
**To:** Aurmont, Tair (CXFC 51); Rippetoe, Grant L. (CXF); Penton, Philip (CLME); Cross, Simon (CLME 23); Rodger, Elena (CXFC 5)  
**Cc:** Benchekroun, Hamza (CLME 1)  
**Subject:** RE: ITS Flow Update - Feb 5 selloff

How did they cover their vega? Were they buying VIX futures or something else? Did we drive the price of the VIX futures higher while trying to hedge?

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**From:** Aurmont, Tair (CXFC 51) <tair.aurmont@credit-suisse.com>  
**Date:** Monday, Feb 05, 2018, 20:16  
**To:** Rippetoe, Grant L. (CXF) <grant.rippetoe@credit-suisse.com>, Penton, Philip (CLME) <philip.penton@credit-suisse.com>, Cross, Simon (CLME 23) <simon.cross@credit-suisse.com>, Ward, Anthony (CXFC) <anthony.ward@credit-suisse.com>, Rodger, Elena (CXFC 5) <elena.rodger@credit-suisse.com>  
**Cc:** Benchekroun, Hamza (CLME 1) <hamza.belabbes@credit-suisse.com>  
**Subject:** RE: ITS Flow Update - Feb 5 selloff

Hi Grant:

Please see risk slides from previous night, COB Feb 2<sup>nd</sup>.  
 I'll send Feb 5<sup>th</sup> risks later today / tmrw morning.

**EXHIBIT**  
**133**

**Overall:**

- **Positives:**
  - RT Vega has been benign through -5%, getting slightly shorter @ -10%.
  - However, right-way long RT Volga helps quite a bit with Vol position getting longer on downside.
  - Long dispersion: long SS Gamma & Vega, which has been carrying well.
- **Negatives:**
  - Short downside gamma, however it's offset with Vega.
  - Regional basis between Latam/SPX and SX5E/SPX, however size is not excessive at \$2-3m vega per leg..
  - Term structure basis, particularly between SPX/SX5E, has been hurting with carry, but again the size is not excessive.

**1) P&L Profile by Desk / Underlier (\$M):**

- Risk: mainly short SPX/long NKY basis, however gamma is mitigated with RT vega, and US desks likely covered short today.
- Benign dispersion with long SS vs Idx.

		-20%	-10%	-5%	-2%	2%	5%
<b>Desk Region</b>	<b>TOTAL</b>	<b>76</b>	<b>-5</b>	<b>-4</b>	<b>-2</b>	<b>1</b>	<b>3</b>
	<b>AMER</b>	<b>-7</b>	<b>-13</b>	<b>-3</b>	<b>-0</b>	<b>-0</b>	<b>2</b>
	<b>EMEA</b>	<b>35</b>	<b>2</b>	<b>-2</b>	<b>-2</b>	<b>2</b>	<b>0</b>
	<b>SWIS</b>	<b>47</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>-0</b>	<b>1</b>
<b>SS / Idx</b>	<b>SS Underlying</b>	<b>152</b>	<b>39</b>	<b>10</b>	<b>2</b>	<b>2</b>	<b>11</b>
	<b>Idx Underlying</b>	<b>-76</b>	<b>-44</b>	<b>-14</b>	<b>-4</b>	<b>-1</b>	<b>-9</b>
<b>Underlying Region</b>	<b>Americas</b>	<b>-36</b>	<b>-26</b>	<b>-8</b>	<b>-2</b>	<b>1</b>	<b>4</b>
	North America	-28	-21	-6	-2	1	5
	LatAm	-8	-5	-2	-0	-0	-1
	<b>EMEA</b>	<b>11</b>	<b>2</b>	<b>-3</b>	<b>-2</b>	<b>1</b>	<b>-2</b>
	Europe	5	-0	-4	-2	1	-2
	North-Western	13	1	-3	-2	1	-3
	SX5E	-43	-14	-6	-2	1	-2
	UK	20	6	1	-0	0	0
	Germany	19	6	1	0	-0	-1
	Switzerland	11	2	0	0	-0	-1
	<b>Asia</b>	<b>62</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>-0</b>	<b>0</b>
	Japan	62	4	1	0	0	1
	<b>Other</b>	<b>39</b>	<b>16</b>	<b>6</b>	<b>2</b>	<b>-1</b>	<b>-0</b>

**2) Gamma by Spot (\$M):**

- Similar to above.

	-10%	-6%	-3%	-2%	-1%	-	1%	2%	3%	6%
<b>TOTAL</b>	<b>175</b>	<b>14</b>	<b>34</b>	<b>9</b>	<b>-15</b>	<b>-23</b>	<b>-30</b>	<b>-6</b>	<b>12</b>	<b>32</b>
AMER	103	-26	-24	-35	-37	-16	3	43	50	10
EMEA	29	16	53	42	19	-13	-42	-61	-52	13
SS Underlying	69	73	82	81	82	88	84	93	92	101
Idx Underlying	105	-60	-48	-72	-97	-111	-114	-99	-80	-69

**3) RT Vega by Spot (\$M):**

- Similarly, long RT Vega SS dispersion.

	-10%	-5%	-2%	-	2%	5%
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<b>TOTAL</b>	-1.6	3.5	1.7	2.0	6.3	14.3
AMER	3.1	5.8	3.3	2.4	7.0	10.4
EMEA	-6.6	-3.1	-1.6	-0.7	-0.7	2.5
SS Underlying	6.1	6.1	5.8	6.8	12.7	14.5
Idx Underlying	-7.7	-2.6	-4.1	-4.8	-6.4	-0.2

## 4) RT Volga By Spot (\$K):

• Long RT Volga mainly from VIX Options. Spot scenarios understates the effect, while Vol move alone was significant.

	-20%	-15%	-10%	-5%	-2%	-	2%	5%
<b>TOTAL</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>
<b>Americas</b>	<b>167</b>	<b>1,320</b>	<b>440</b>	<b>-255</b>	<b>1,481</b>	<b>2,430</b>	<b>1,813</b>	<b>1,085</b>
Idx	73	1,191	230	-618	1,092	2,061	1,441	755
SS	94	129	210	362	389	369	371	330
<b>Europe</b>	<b>-185</b>	<b>852</b>	<b>246</b>	<b>97</b>	<b>363</b>	<b>444</b>	<b>89</b>	<b>-1,363</b>
Idx	-361	677	47	-123	148	237	-109	-1,568
SS	176	175	199	220	214	206	198	205

## 4) Parallel Vega by Spot by Desk Region and Underlier (\$M):

		-20%	-10%	-5%	-2%	-	2%	5%
<b>Desk Region</b>	<b>TOTAL</b>	<b>-8.7</b>	<b>-5.3</b>	<b>-1.3</b>	<b>0.3</b>	<b>1.7</b>	<b>4.0</b>	<b>6.7</b>
	AMER	0.5	2.8	4.0	3.7	3.8	4.5	4.9
	EMEA	-9.2	-8.6	-5.5	-3.3	-2.0	-0.5	1.9
	SWIS	-0.0	0.4	0.1	-0.0	-0.1	0.0	-0.2
<b>Underlying Region</b>	<b>Americas</b>	<b>-3.7</b>	<b>-1.4</b>	<b>0.3</b>	<b>0.4</b>	<b>0.9</b>	<b>1.9</b>	<b>2.8</b>
	North America	-5.7	-3.7	-2.3	-2.2	-1.9	-0.9	-0.3
	LatAm	2.0	2.4	2.5	2.6	2.7	2.9	3.1
	<b>EMEA</b>	<b>-6.1</b>	<b>-4.8</b>	<b>-2.4</b>	<b>-0.8</b>	<b>0.2</b>	<b>1.5</b>	<b>3.5</b>
	Europe	-6.4	-5.1	-2.7	-1.1	-0.1	1.2	3.2
	North-Western	-6.1	-5.0	-2.8	-1.4	-0.6	0.6	2.4
	SXSE	-4.3	-3.3	-1.4	-0.1	0.8	2.0	4.0
	UK	0.6	-0.4	-0.4	-0.3	-0.3	-0.4	-0.2
	Germany	-1.0	-0.6	-0.4	-0.4	-0.4	-0.4	-0.6
	France	-0.3	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3
	Switzerland	-1.3	-1.0	-1.0	-1.0	-1.1	-1.0	-1.2
	<b>Asia</b>	<b>1.1</b>	<b>0.8</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>
	Japan	0.9	0.5	0.4	0.5	0.5	0.5	0.5

## 5) Parallel Vega by Tenor/Region (\$K):

		<b>TOTAL</b>	<b>1m</b>	<b>2m</b>	<b>3m</b>	<b>6m</b>	<b>12m</b>	<b>18m</b>	<b>2y</b>	<b>3y</b>	<b>5y</b>	<b>7y</b>	<b>10y</b>
<b>Desk Region</b>	<b>TOTAL</b>	<b>1,497</b>	<b>-278</b>	<b>-368</b>	<b>-818</b>	<b>3,195</b>	<b>243</b>	<b>-1,110</b>	<b>3,406</b>	<b>124</b>	<b>-1,300</b>	<b>-1,037</b>	<b>-559</b>
	AMER	3,565	-101	-41	-1,609	2,490	2,585	-1,382	371	-34	625	352	310
	EMEA	-1,957	-279	-433	595	1,464	-1,723	278	1,874	-16	-1,458	-1,389	-869
	SWIS	-112	102	106	196	-759	-619	-6	1,160	174	-467	-	-
<b>SS / Idx</b>	<b>SS Underlying</b>	<b>-1,861</b>	<b>-873</b>	<b>-885</b>	<b>-1,580</b>	<b>995</b>	<b>-1,221</b>	<b>515</b>	<b>4,366</b>	<b>341</b>	<b>-1,382</b>	<b>-1,261</b>	<b>-877</b>
	Idx Underlying	3,357	594	517	761	2,200	1,464	-1,626	-960	-217	82	223	318
<b>Underlying Region</b>	<b>Americas</b>	<b>652</b>	<b>58</b>	<b>49</b>	<b>-2,023</b>	<b>1,624</b>	<b>1,476</b>	<b>-1,295</b>	<b>4</b>	<b>-382</b>	<b>479</b>	<b>352</b>	<b>310</b>
	North America	-2,038	15	38	-1,682	945	286	-1,198	-264	-389	228	-9	-8
	LatAm	2,691	44	11	-340	679	1,191	-98	268	7	250	360	318
	<b>EMEA</b>	<b>202</b>	<b>-409</b>	<b>-446</b>	<b>1,069</b>	<b>1,384</b>	<b>-1,125</b>	<b>103</b>	<b>3,158</b>	<b>506</b>	<b>-1,779</b>	<b>-1,389</b>	<b>-869</b>

Europe	-105	-427	-484	984	1,288	-1,146	99	3,160	457	-1,779	-1,389	-869
Asia	720	-11	34	77	141	154	82	244	-	-	-	-
Japan	720	-11	34	77	141	154	82	244	-	-	-	-

**From:** Aurmont, Tair (CXFC 51)

**Sent:** Monday, February 05, 2018 5:24 PM

**To:** Rippetoe, Grant L. (CXF); Penton, Philip (CLME); Cross, Simon (CLME 23); Ward, Anthony (CXFC); Rodger, Elena (CXFC 5)

**Cc:** Benchekroun, Hamza (CLME 1)

**Subject:** RE: ITS Flow Update - Feb 5 selloff

Very roughly:

- Judging from the short squeeze between 16:00-16:15, we probably got exposed half-way through, i.e. left with -10m vega naked vega that desk has been covering.
- Currently, I have no info on what levels desk has been covering at, but P&L could be ugly.

**From:** Aurmont, Tair (CXFC 51)

**Sent:** Monday, February 05, 2018 4:58 PM

**To:** Rippetoe, Grant L. (CXF); Penton, Philip (CLME); Cross, Simon (CLME 23); Ward, Anthony (CXFC); Rodger, Elena (CXFC 5)

**Cc:** Benchekroun, Hamza (CLME 1)

**Subject:** RE: ITS Flow Update - Feb 5 selloff

Still trying to get more details. Probably will take some time.

Traders can't talk right now due to that.

**From:** Rippetoe, Grant L. (CXF)

**Sent:** Monday, February 05, 2018 4:52 PM

**To:** Aurmont, Tair (CXFC 51); Penton, Philip (CLME); Cross, Simon (CLME 23); Ward, Anthony (CXFC); Rodger, Elena (CXFC 5)

**Cc:** Benchekroun, Hamza (CLME 1)

**Subject:** RE: ITS Flow Update - Feb 5 selloff

Is this p/l still flat? I know they are working out of some short vega as the VIX spiked.

Sent with BlackBerry Work

([www.blackberry.com](http://www.blackberry.com))

**From:** Aurmont, Tair (CXFC 51) <[tair.aurmont@credit-suisse.com](mailto:tair.aurmont@credit-suisse.com)>

**Date:** Monday, Feb 05, 2018, 9:00 PM

**To:** Rippetoe, Grant L. (CXF) <[grant.rippetoe@credit-suisse.com](mailto:grant.rippetoe@credit-suisse.com)>, Penton, Philip (CLME) <[philip.penton@credit-suisse.com](mailto:philip.penton@credit-suisse.com)>, Cross, Simon (CLME 23) <[simon.cross@credit-suisse.com](mailto:simon.cross@credit-suisse.com)>, Ward, Anthony (CXFC) <[anthony.ward@credit-suisse.com](mailto:anthony.ward@credit-suisse.com)>, Rodger, Elena (CXFC 5) <[elena.rodger@credit-suisse.com](mailto:elena.rodger@credit-suisse.com)>

**Cc:** Benchekroun, Hamza (CLME 1) <[hamza.belabbes@credit-suisse.com](mailto:hamza.belabbes@credit-suisse.com)>

**Subject:** ITS Flow Update - Feb 5 selloff

Quite a historic move, especially for VIX spot hitting >100% spike intra-day.

**P&L:** expect a mild gain from MTM alone:

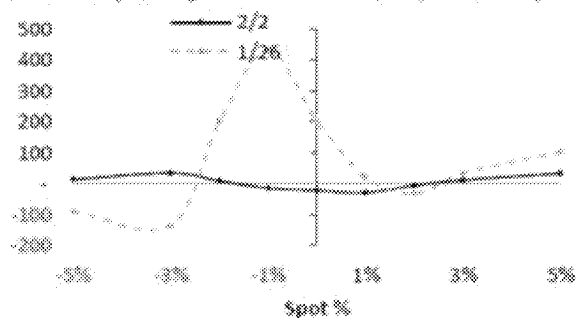
- P&L being helped with long RT Vega as well as Skew.

- But vol marks are still too noisy, and hard to tell where they will settle for EOD.

#### Risks:

- Gamma flattish @ -20m
- Flips to small positive for Spot -3-5%.

#### GAMMA (LOCAL)



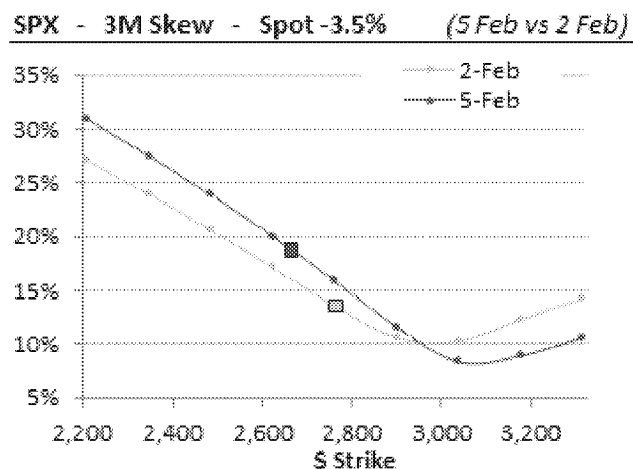
- RT Vega @ +2.0m
- Remains positive through Spot -5%.
- Spot -5% Vol +2% Scenario -0.7m:
  - -4.3m: Short spot across US/EU Flow
  - +3.6m: offset with long RT Vol mainly from US buying back +2.3m RT Vega

#### MODERATE SPOT-VOL (Root-time)

-5%			-2%		
Spot	3m Vol	TOTAL	Spot	3m Vol	TOTAL
-5%	2%		-2%	0.8%	
-4.3	3.6	-0.7	-2.1	1.4	-0.7

#### Market Move:

- 3mth Vol +2.3pts
- 3mth Skew +0.9pts



**From:** Aurmont, Tair (CXFC 51)

**Sent:** Friday, February 02, 2018 7:25 PM

**To:** Rippetoe, Grant L. (CXF); Penton, Philip (CLME); Cross, Simon (CLME 23); Rodger, Elena (CXFC 5)

**Cc:** Benchekroun, Hamza (CLME 1)

**Subject:** ITS Flow Update - Feb 2 selloff

Hi,

**Overall:**

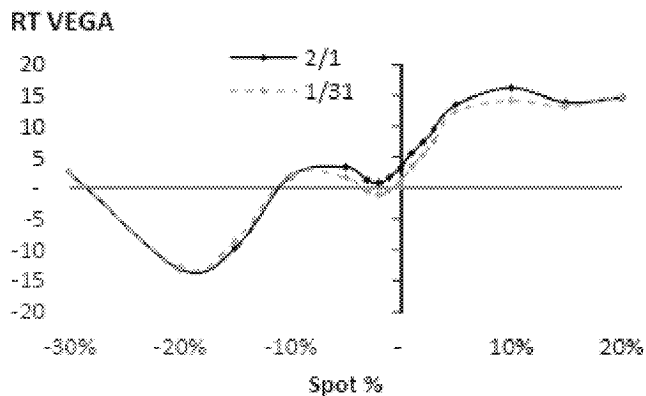
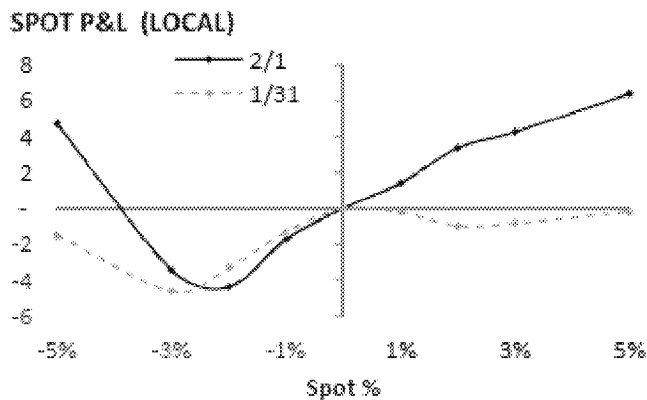
- Ok performance with Vols & Skew helping short Gamma.
- Muted client activity with smaller than anticipated CRev, but also indicative of no panic.

**P&L:**

- **TOTAL:** flattish including delta/gamma hedging + Client trading
- **MTM-Only:** ~-1-2m
  - AMER ~flattish: ~-1m Gamma was offset with ~+1-2m Vol and Skew gains as Index/SS were long time-weighted skew.
  - EMEA ~-1-2m: mainly on short SX5E gamma with flattish vol P&L.

**Risks:**

- Moderate Scenario predict -3m ( Spot -2% , 3mVol +0.4% )
- -4m from Spot: mainly from EU running ~100m SX5E Delta
- +1m from Vols

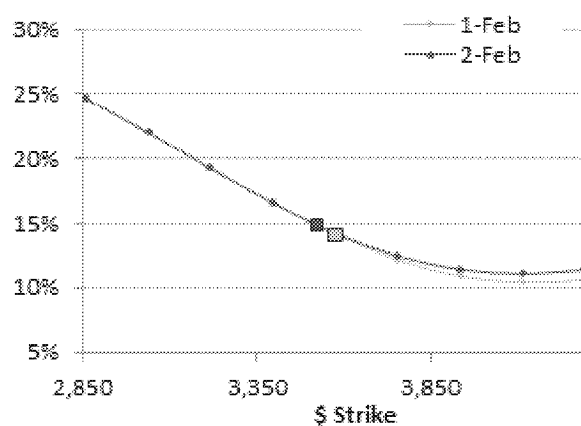
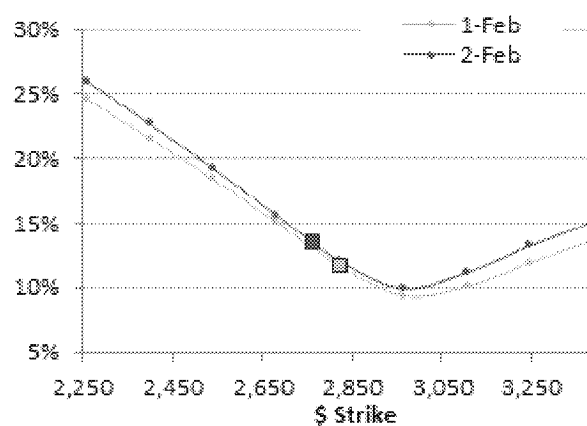


**Market Move:**

- Controlled selloff with some protection buying, but no panic.
- Vols rose mostly along the skew:
  - SPX 3mth Vol: +1.4% skew delta, +0.5% fixed strike
  - SX5E 3mth Vol: +0.6% skew delta, +0.1% fixed strike
- SPX Skew also steepened from some protection demand, although client flow wasn't big.



SPX - 3M Skew - Spot -2.1% (2 Feb vs 1 Feb)      SX5E - 3M Skew - Spot -1.5% (2 Feb vs 1 Feb)



Tair Aurmont

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